

**BACHELOR OF ENGINEERING (MECHANICAL ENGINEERING)
FIRST YEAR FIRST SEMESTER – 2023
MACHINE DRAWING – I**

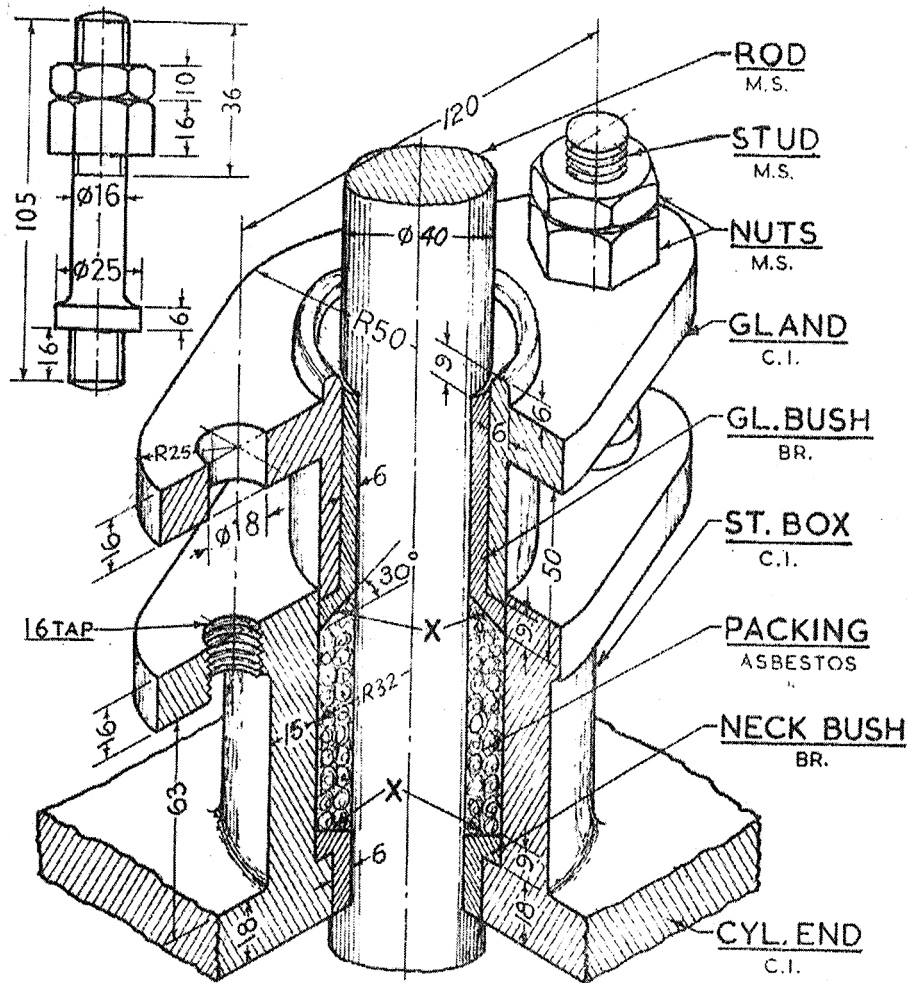
Total Time 4 hrs

Full Marks: 100

Missing data if any are to be reasonably assumed. All dimensions are in mm.

Q1. Draw the detailed drawing of the stuffing box

[60]



Q2. Draw the assembly drawing of the socket and spigot type cotter joint using the following relationships. [40]

Rod diameter = 25 mm, Spigot diameter = 32 mm, Socket diameter = 45 mm, Spigot collar diameter = 45 mm, Spigot collar thickness = 12 mm, Socket collar diameter = 63 mm, Socket collar thickness = 25 mm, Mean width of the cotter = 32 mm, Cotter thickness = 6 mm, Cotter length = 100 mm, Taper in cotter = 1:20, Distance of spigot end from the cotter = 23 mm, Clearance = 3 mm, Other dimensions may be assumed reasonably.